# Release notes for ENDF/B Development n-054_Xe_133 evaluation

April 26, 2017

- `checkr` Warnings:

  1. A previous error halted parsing of the current section
     *MAT=5452, MF= 1, MT=451 (1): Parsing stopped*

     ```
     ERROR(S) FOUND IN MAT=5452, MF= 1, MT=451
         SECTION CANNOT BE CHECKED FROM SEQUENCE NUMBER     218 TO     275
     ```

- `checkr` Errors:

  1. A variable is outside the allowed ENDF range
     *MAT=5452, MF= 1, MT=451 (0): Variable range*

     ```
     ERROR(S) FOUND IN MAT=5452, MF= 1, MT=451
         MOD =     1 OUT OF RANGE    0 -    0          RECORD NUMBER    218
     ```

  2. Missing a section in directory so your directory is messed up. This error will break everything else
     *MAT=5452, MF= 2, MT=151 (0): Directory (b)*

     ```
     ERROR(S) FOUND IN MAT=5452, MF= 2, MT=151
         SECTION  2/151 NOT IN DIRECTORY               RECORD NUMBER    277
     ```

  3. Missing a section in directory so your directory is messed up. This error will break everything else
     *MAT=5452, MF= 3, MT= 1 (0): Directory (b)*

     ```
     ERROR(S) FOUND IN MAT=5452, MF= 3, MT=  1
         SECTION  3/  1 NOT IN DIRECTORY               RECORD NUMBER    605
     ```

  4. Missing a section in directory so your directory is messed up. This error will break everything else
     *MAT=5452, MF= 3, MT= 2 (0): Directory (b)*

     ```
     ERROR(S) FOUND IN MAT=5452, MF= 3, MT=  2
         SECTION  3/  2 NOT IN DIRECTORY               RECORD NUMBER    636
     ```

  5. Missing a section in directory so your directory is messed up. This error will break everything else
     *MAT=5452, MF= 3, MT= 4 (0): Directory (b)*

     ```
     ERROR(S) FOUND IN MAT=5452, MF= 3, MT=  4
         SECTION  3/  4 NOT IN DIRECTORY               RECORD NUMBER    665
     ```

  6. Missing a section in directory so your directory is messed up. This error will break everything else
     *MAT=5452, MF= 3, MT= 16 (0): Directory (b)*

     ```
     ERROR(S) FOUND IN MAT=5452, MF= 3, MT= 16
         SECTION  3/ 16 NOT IN DIRECTORY               RECORD NUMBER    683
     ```

  7. Missing a section in directory so your directory is messed up. This error will break everything else
     *MAT=5452, MF= 3, MT= 17 (0): Directory (b)*

1

```
         ERROR(S) FOUND IN MAT=5452, MF= 3, MT= 17
            SECTION  3/ 17 NOT IN DIRECTORY                 RECORD NUMBER     695
```

8. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 3, MT= 22 (0): Directory (b)*

```
         ERROR(S) FOUND IN MAT=5452, MF= 3, MT= 22
            SECTION  3/ 22 NOT IN DIRECTORY                 RECORD NUMBER     702
```

9. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 3, MT= 28 (0): Directory (b)*

```
         ERROR(S) FOUND IN MAT=5452, MF= 3, MT= 28
            SECTION  3/ 28 NOT IN DIRECTORY                 RECORD NUMBER     716
```

10. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 3, MT= 32 (0): Directory (b)*

```
         ERROR(S) FOUND IN MAT=5452, MF= 3, MT= 32
            SECTION  3/ 32 NOT IN DIRECTORY                 RECORD NUMBER     726
```

11. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 3, MT= 51 (0): Directory (b)*

```
         ERROR(S) FOUND IN MAT=5452, MF= 3, MT= 51
            SECTION  3/ 51 NOT IN DIRECTORY                 RECORD NUMBER     734
```

12. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 3, MT= 52 (0): Directory (b)*

```
         ERROR(S) FOUND IN MAT=5452, MF= 3, MT= 52
            SECTION  3/ 52 NOT IN DIRECTORY                 RECORD NUMBER     752
```

13. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 3, MT= 53 (0): Directory (b)*

```
         ERROR(S) FOUND IN MAT=5452, MF= 3, MT= 53
            SECTION  3/ 53 NOT IN DIRECTORY                 RECORD NUMBER     769
```

14. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 3, MT= 54 (0): Directory (b)*

```
         ERROR(S) FOUND IN MAT=5452, MF= 3, MT= 54
            SECTION  3/ 54 NOT IN DIRECTORY                 RECORD NUMBER     785
```

15. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 3, MT= 55 (0): Directory (b)*

```
      ERROR(S) FOUND IN MAT=5452, MF= 3, MT= 55
         SECTION  3/ 55 NOT IN DIRECTORY                RECORD NUMBER     801
```

16. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 3, MT= 56 (0): Directory (b)*

```
      ERROR(S) FOUND IN MAT=5452, MF= 3, MT= 56
         SECTION  3/ 56 NOT IN DIRECTORY                RECORD NUMBER     816
```

17. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 3, MT= 57 (0): Directory (b)*

```
      ERROR(S) FOUND IN MAT=5452, MF= 3, MT= 57
         SECTION  3/ 57 NOT IN DIRECTORY                RECORD NUMBER     830
```

18. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 3, MT= 58 (0): Directory (b)*

```
      ERROR(S) FOUND IN MAT=5452, MF= 3, MT= 58
         SECTION  3/ 58 NOT IN DIRECTORY                RECORD NUMBER     844
```

19. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 3, MT= 59 (0): Directory (b)*

```
      ERROR(S) FOUND IN MAT=5452, MF= 3, MT= 59
         SECTION  3/ 59 NOT IN DIRECTORY                RECORD NUMBER     857
```

20. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 3, MT= 60 (0): Directory (b)*

```
      ERROR(S) FOUND IN MAT=5452, MF= 3, MT= 60
         SECTION  3/ 60 NOT IN DIRECTORY                RECORD NUMBER     870
```

21. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 3, MT= 61 (0): Directory (b)*

```
      ERROR(S) FOUND IN MAT=5452, MF= 3, MT= 61
         SECTION  3/ 61 NOT IN DIRECTORY                RECORD NUMBER     882
```

22. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 3, MT= 62 (0): Directory (b)*

```
      ERROR(S) FOUND IN MAT=5452, MF= 3, MT= 62
         SECTION  3/ 62 NOT IN DIRECTORY                RECORD NUMBER     894
```

23. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 3, MT= 63 (0): Directory (b)*

```
ERROR(S) FOUND IN MAT=5452, MF= 3, MT= 63
    SECTION  3/ 63 NOT IN DIRECTORY                 RECORD NUMBER      905
```

24. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 3, MT= 64 (0): Directory (b)*

```
ERROR(S) FOUND IN MAT=5452, MF= 3, MT= 64
    SECTION  3/ 64 NOT IN DIRECTORY                 RECORD NUMBER      916
```

25. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 3, MT= 91 (0): Directory (b)*

```
ERROR(S) FOUND IN MAT=5452, MF= 3, MT= 91
    SECTION  3/ 91 NOT IN DIRECTORY                 RECORD NUMBER      926
```

26. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 3, MT=102 (0): Directory (b)*

```
ERROR(S) FOUND IN MAT=5452, MF= 3, MT=102
    SECTION  3/102 NOT IN DIRECTORY                 RECORD NUMBER      936
```

27. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 3, MT=103 (0): Directory (b)*

```
ERROR(S) FOUND IN MAT=5452, MF= 3, MT=103
    SECTION  3/103 NOT IN DIRECTORY                 RECORD NUMBER      960
```

28. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 3, MT=104 (0): Directory (b)*

```
ERROR(S) FOUND IN MAT=5452, MF= 3, MT=104
    SECTION  3/104 NOT IN DIRECTORY                 RECORD NUMBER      975
```

29. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 3, MT=105 (0): Directory (b)*

```
ERROR(S) FOUND IN MAT=5452, MF= 3, MT=105
    SECTION  3/105 NOT IN DIRECTORY                 RECORD NUMBER      987
```

30. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 3, MT=107 (0): Directory (b)*

```
ERROR(S) FOUND IN MAT=5452, MF= 3, MT=107
    SECTION  3/107 NOT IN DIRECTORY                 RECORD NUMBER      998
```

31. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 4, MT= 2 (0): Directory (b)*

```
       ERROR(S) FOUND IN MAT=5452, MF= 4, MT=  2
          SECTION  4/  2 NOT IN DIRECTORY                 RECORD NUMBER    1015
```

32. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 4, MT= 16 (0): Directory (b)*

```
       ERROR(S) FOUND IN MAT=5452, MF= 4, MT= 16
          SECTION  4/ 16 NOT IN DIRECTORY                 RECORD NUMBER    1200
```

33. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 4, MT= 17 (0): Directory (b)*

```
       ERROR(S) FOUND IN MAT=5452, MF= 4, MT= 17
          SECTION  4/ 17 NOT IN DIRECTORY                 RECORD NUMBER    1211
```

34. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 4, MT= 22 (0): Directory (b)*

```
       ERROR(S) FOUND IN MAT=5452, MF= 4, MT= 22
          SECTION  4/ 22 NOT IN DIRECTORY                 RECORD NUMBER    1222
```

35. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 4, MT= 28 (0): Directory (b)*

```
       ERROR(S) FOUND IN MAT=5452, MF= 4, MT= 28
          SECTION  4/ 28 NOT IN DIRECTORY                 RECORD NUMBER    1233
```

36. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 4, MT= 32 (0): Directory (b)*

```
       ERROR(S) FOUND IN MAT=5452, MF= 4, MT= 32
          SECTION  4/ 32 NOT IN DIRECTORY                 RECORD NUMBER    1244
```

37. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 4, MT= 51 (0): Directory (b)*

```
       ERROR(S) FOUND IN MAT=5452, MF= 4, MT= 51
          SECTION  4/ 51 NOT IN DIRECTORY                 RECORD NUMBER    1255
```

38. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 4, MT= 52 (0): Directory (b)*

```
       ERROR(S) FOUND IN MAT=5452, MF= 4, MT= 52
          SECTION  4/ 52 NOT IN DIRECTORY                 RECORD NUMBER    1280
```

39. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 4, MT= 53 (0): Directory (b)*

```
        ERROR(S) FOUND IN MAT=5452, MF= 4, MT= 53
          SECTION  4/ 53 NOT IN DIRECTORY                RECORD NUMBER    1308
```

40. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 4, MT= 54 (0): Directory (b)*

```
        ERROR(S) FOUND IN MAT=5452, MF= 4, MT= 54
          SECTION  4/ 54 NOT IN DIRECTORY                RECORD NUMBER    1336
```

41. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 4, MT= 55 (0): Directory (b)*

```
        ERROR(S) FOUND IN MAT=5452, MF= 4, MT= 55
          SECTION  4/ 55 NOT IN DIRECTORY                RECORD NUMBER    1364
```

42. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 4, MT= 56 (0): Directory (b)*

```
        ERROR(S) FOUND IN MAT=5452, MF= 4, MT= 56
          SECTION  4/ 56 NOT IN DIRECTORY                RECORD NUMBER    1389
```

43. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 4, MT= 57 (0): Directory (b)*

```
        ERROR(S) FOUND IN MAT=5452, MF= 4, MT= 57
          SECTION  4/ 57 NOT IN DIRECTORY                RECORD NUMBER    1416
```

44. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 4, MT= 58 (0): Directory (b)*

```
        ERROR(S) FOUND IN MAT=5452, MF= 4, MT= 58
          SECTION  4/ 58 NOT IN DIRECTORY                RECORD NUMBER    1443
```

45. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 4, MT= 59 (0): Directory (b)*

```
        ERROR(S) FOUND IN MAT=5452, MF= 4, MT= 59
          SECTION  4/ 59 NOT IN DIRECTORY                RECORD NUMBER    1467
```

46. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 4, MT= 60 (0): Directory (b)*

```
        ERROR(S) FOUND IN MAT=5452, MF= 4, MT= 60
          SECTION  4/ 60 NOT IN DIRECTORY                RECORD NUMBER    1491
```

47. Missing a section in directory so your directory is messed up. This error will break everything else
    *MAT=5452, MF= 4, MT= 61 (0): Directory (b)*

```
        ERROR(S) FOUND IN MAT=5452, MF= 4, MT= 61
           SECTION  4/ 61 NOT IN DIRECTORY                 RECORD NUMBER    1515
```

48. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=5452, MF= 4, MT= 62 (0)$: Directory (b)

```
        ERROR(S) FOUND IN MAT=5452, MF= 4, MT= 62
           SECTION  4/ 62 NOT IN DIRECTORY                 RECORD NUMBER    1539
```

49. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=5452, MF= 4, MT= 63 (0)$: Directory (b)

```
        ERROR(S) FOUND IN MAT=5452, MF= 4, MT= 63
           SECTION  4/ 63 NOT IN DIRECTORY                 RECORD NUMBER    1563
```

50. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=5452, MF= 4, MT= 64 (0)$: Directory (b)

```
        ERROR(S) FOUND IN MAT=5452, MF= 4, MT= 64
           SECTION  4/ 64 NOT IN DIRECTORY                 RECORD NUMBER    1586
```

51. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=5452, MF= 4, MT= 91 (0)$: Directory (b)

```
        ERROR(S) FOUND IN MAT=5452, MF= 4, MT= 91
           SECTION  4/ 91 NOT IN DIRECTORY                 RECORD NUMBER    1609
```

52. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=5452, MF= 5, MT= 16 (0)$: Directory (b)

```
        ERROR(S) FOUND IN MAT=5452, MF= 5, MT= 16
           SECTION  5/ 16 NOT IN DIRECTORY                 RECORD NUMBER    1634
```

53. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=5452, MF= 5, MT= 17 (0)$: Directory (b)

```
        ERROR(S) FOUND IN MAT=5452, MF= 5, MT= 17
           SECTION  5/ 17 NOT IN DIRECTORY                 RECORD NUMBER    1703
```

54. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=5452, MF= 5, MT= 22 (0)$: Directory (b)

```
        ERROR(S) FOUND IN MAT=5452, MF= 5, MT= 22
           SECTION  5/ 22 NOT IN DIRECTORY                 RECORD NUMBER    1735
```

55. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=5452, MF= 5, MT= 28 (0)$: Directory (b)

```
      ERROR(S) FOUND IN MAT=5452, MF= 5, MT= 28
           SECTION  5/ 28 NOT IN DIRECTORY                  RECORD NUMBER   1934
```

56. Missing a section in directory so your directory is messed up. This error will break everything else
*MAT=5452, MF= 5, MT= 32 (0): Directory (b)*

```
      ERROR(S) FOUND IN MAT=5452, MF= 5, MT= 32
           SECTION  5/ 32 NOT IN DIRECTORY                  RECORD NUMBER   2028
```

57. Missing a section in directory so your directory is messed up. This error will break everything else
*MAT=5452, MF= 5, MT= 91 (0): Directory (b)*

```
      ERROR(S) FOUND IN MAT=5452, MF= 5, MT= 91
           SECTION  5/ 91 NOT IN DIRECTORY                  RECORD NUMBER   2072
```

- `psyche`   Warnings:

1. Strength function in URR not in agreement with PSYCHE's expectations
*FILE 2 / SECTION 151 / ENERGY = 8.05000E+01.  STRENGTH FUNCTION IS 1.03999E-04 / STRENGTH FUNCTION 1.03999E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.*

```
      FILE  2
         SECTION 151
             ENERGY =  8.05000E+01. STRENGTH FUNCTION IS  1.03999E-04
                         STRENGTH FUNCTION 1.03999E-04
                                          LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04
      ... [18 more lines]
```

2. Strength function in URR not in agreement with PSYCHE's expectations
*FILE 2 / SECTION 151 / ENERGY = 8.05000E+01.  STRENGTH FUNCTION IS 1.03999E-04 / STRENGTH FUNCTION 1.04000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.*

```
      FILE  2
         SECTION 151
             ENERGY =  8.05000E+01. STRENGTH FUNCTION IS  1.03999E-04
                         STRENGTH FUNCTION 1.04000E-04
                                          LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04
      ... [4 more lines]
```

3. Strength function in URR not in agreement with PSYCHE's expectations
*FILE 2 / SECTION 151 / ENERGY = 8.05000E+01.  STRENGTH FUNCTION IS 1.03999E-04 / STRENGTH FUNCTION 1.04001E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.*

```
      FILE  2
         SECTION 151
             ENERGY =  8.05000E+01. STRENGTH FUNCTION IS  1.03999E-04
                         STRENGTH FUNCTION 1.04001E-04
                                          LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04
      ... [1 more lines]
```

4. Strength function in URR not in agreement with PSYCHE's expectations
*FILE 2 / SECTION 151 / ENERGY = 8.05000E+01. STRENGTH FUNCTION IS 1.03999E-04 / STRENGTH FUNCTION 1.04002E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.*

```
FILE  2
    SECTION 151
         ENERGY =  8.05000E+01. STRENGTH FUNCTION IS  1.03999E-04
                         STRENGTH FUNCTION 1.04002E-04
                                         LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04
```

5. Strength function in URR not in agreement with PSYCHE's expectations
*FILE 2 / SECTION 151 / ENERGY = 8.05000E+01. STRENGTH FUNCTION IS 1.03998E-04 / STRENGTH FUNCTION 1.03998E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.*

```
FILE  2
    SECTION 151
         ENERGY =  8.05000E+01. STRENGTH FUNCTION IS  1.03998E-04
                         STRENGTH FUNCTION 1.03998E-04
                                         LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04
... [20 more lines]
```

6. Strength function in URR not in agreement with PSYCHE's expectations
*FILE 2 / SECTION 151 / ENERGY = 8.05000E+01. STRENGTH FUNCTION IS 1.03998E-04 / STRENGTH FUNCTION 1.04001E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.*

```
FILE  2
    SECTION 151
         ENERGY =  8.05000E+01. STRENGTH FUNCTION IS  1.03998E-04
                         STRENGTH FUNCTION 1.04001E-04
                                         LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04
```

7. Strength function in URR not in agreement with PSYCHE's expectations
*FILE 2 / SECTION 151 / ENERGY = 8.05000E+01. STRENGTH FUNCTION IS 1.03998E-04 / STRENGTH FUNCTION 1.03999E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.*

```
FILE  2
    SECTION 151
         ENERGY =  8.05000E+01. STRENGTH FUNCTION IS  1.03998E-04
                         STRENGTH FUNCTION 1.03999E-04
                                         LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04
```

8. Strength function in URR not in agreement with PSYCHE's expectations
*FILE 2 / SECTION 151 / ENERGY = 8.05000E+01. STRENGTH FUNCTION IS 1.03998E-04 / STRENGTH FUNCTION 1.04003E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.*

```
FILE  2
    SECTION 151
         ENERGY =  8.05000E+01. STRENGTH FUNCTION IS  1.03998E-04
                         STRENGTH FUNCTION 1.04003E-04
                                         LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04
```

9. Strength function in URR not in agreement with PSYCHE's expectations
*FILE 2 / SECTION 151 / ENERGY = 8.05000E+01. STRENGTH FUNCTION IS 1.03998E-04 / STRENGTH FUNCTION 1.04000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.*

```
FILE  2
   SECTION 151
         ENERGY =  8.05000E+01. STRENGTH FUNCTION IS  1.03998E-04
                          STRENGTH FUNCTION 1.04000E-04
                                        LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04
... [2 more lines]
```

- `recent`   Warnings:

   1. Fission widths given for non-fissile nucleus, but are zero
   *0: Fission?*

```
Calculate Cross Sections from Resonance Parameters (RECENT 2015-1)
================================================================================
Retrieval Criteria-----------         MAT
File 2 Mimimum Cross Section- 1.0000E-10 (Standard Option)
Reactions with No Background-      Output (Resonance Contribution)
... [574 more lines]
```

- `fudge-4.0`   Warnings:

   1. Cross section does not match sum of linked reaction cross sections
   *crossSectionSum label 0: total (Error # 0): CS Sum.*

```
WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.96%
```

- `fudge-4.0`   Errors:

   1. Calculated and tabulated Q values disagree.
   *reaction label 16: n[multiplicity:'2'] + Xe132 (Error # 0): Q mismatch*

```
WARNING: Calculated and tabulated Q-values disagree: -6608405.50201416 eV vs -6.4521e6 eV!
```

   2. Calculated and tabulated Q values disagree.
   *reaction label 17: n[multiplicity:'3'] + Xe131 (Error # 0): Q mismatch*

```
WARNING: Calculated and tabulated Q-values disagree: -15544992.40921021 eV vs -1.53932e7 eV!
```

   3. Calculated and tabulated Q values disagree.
   *reaction label 18: n + H1 + I132 (Error # 0): Q mismatch*

```
WARNING: Calculated and tabulated Q-values disagree: -9406651.186325073 eV vs -9249630. eV!
```

   4. Calculated and tabulated Q values disagree.
   *reaction label 19: n + H2 + I131 (Error # 0): Q mismatch*

```
WARNING: Calculated and tabulated Q-values disagree: -13508926.54547119 eV vs -1.32706e7 eV!
```

   5. Calculated and tabulated Q values disagree.
   *reaction label 20: Xe134 + gamma (Error # 0): Q mismatch*

10

```
WARNING: Calculated and tabulated Q-values disagree: 8378238.724121094 eV vs 8534390. eV!
```

6. Calculated and tabulated Q values disagree.
   *reaction label 21: n + He4 + Te129 (Error # 0): Q mismatch*

```
WARNING: Calculated and tabulated Q-values disagree: -3239302.763763428 eV vs -3076890. eV!
```

7. Calculated and tabulated Q values disagree.
   *reaction label 22: H1 + I133_s (Error # 0): Q mismatch*

```
WARNING: Calculated and tabulated Q-values disagree: -1148623.227111816 eV vs -977534. eV!
```

8. Calculated and tabulated Q values disagree.
   *reaction label 23: H2 + I132_s (Error # 0): Q mismatch*

```
WARNING: Calculated and tabulated Q-values disagree: -7182085.085388184 eV vs -6939510. eV!
```

9. Calculated and tabulated Q values disagree.
   *reaction label 24: H3 + I131_s (Error # 0): Q mismatch*

```
WARNING: Calculated and tabulated Q-values disagree: -7251693.604858398 eV vs -7085450. eV!
```

10. Calculated and tabulated Q values disagree.
    *reaction label 25: He4 + Te130_s (Error # 0): Q mismatch*

```
WARNING: Calculated and tabulated Q-values disagree: 5180243.468719482 eV vs 5.3402e6 eV!
```

- `njoy2012` Warnings:

  1. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
     *groupr...compute self-shielded group-averaged cross-sections (0): GROUPR/conver (0)*

     ```
      ---message from conver---cannot do complete particle production for mt= 16
                               only mf4/mf5 provided
     ```

  2. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
     *groupr...compute self-shielded group-averaged cross-sections (1): GROUPR/conver (0)*

     ```
      ---message from conver---cannot do complete particle production for mt= 17
                               only mf4/mf5 provided
     ```

  3. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
     *groupr...compute self-shielded group-averaged cross-sections (2): GROUPR/conver (0)*

     ```
      ---message from conver---cannot do complete particle production for mt= 22
                               only mf4/mf5 provided
     ```

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4. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
   *groupr...compute self-shielded group-averaged cross-sections (3): GROUPR/conver (0)*

   ```
    ---message from conver---cannot do complete particle production for mt= 28
                         only mf4/mf5 provided
   ```

5. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
   *groupr...compute self-shielded group-averaged cross-sections (4): GROUPR/conver (0)*

   ```
    ---message from conver---cannot do complete particle production for mt= 32
                         only mf4/mf5 provided
   ```

6. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
   *groupr...compute self-shielded group-averaged cross-sections (5): GROUPR/conver (0)*

   ```
    ---message from conver---cannot do complete particle production for mt= 91
                         only mf4/mf5 provided
   ```